

WHAT IS CLAIMED IS:

1. A display unit configured for use in a sign display panel comprising:  
  
a central processing unit;  
  
a display output device;  
  
an interface for first receiving a plurality of frames, and second receiving a plurality of display instructions; and  
  
memory for storing software configured for execution by the central processing unit, wherein the software comprises instructions for storing each of the plurality of frames and, upon receipt of each of the plurality of display instructions, processing one of the frames to update the display output device.
2. The display unit of claim 1 wherein each of the plurality of display instructions identifies the one frame for processing.
3. The display unit of claim 1 wherein the frames are processed in order the frames were received.
4. The display unit of claim 1 wherein the frames are stored in a first-in-first-out (FIFO) memory.
5. The display unit of claim 1 wherein processing one of the frames comprises sending instructions to a set of output drivers to update the output display device.

6. The display unit of claim 1 wherein the output display device comprises an LED display.
7. A method of rapidly refreshing a sign display panel, the method comprising:  
  
receiving, based on at least one of a first message, a plurality of frames;  
  
storing each of the plurality of frames;  
  
receiving, based on a second message, at least one of a plurality of display instructions; and  
  
processing, upon receipt of the second message, one of the plurality of frames to update a display output device.
8. The method of claim 7 wherein each of the display instructions identify the one frame for processing.
9. The method of claim 7 wherein the frames are processed in order the frames were received.
10. The method of claim 7 wherein the frames are stored in a first-in-first-out (FIFO) memory.
11. The method of claim 7 wherein processing one of the frames comprises sending instructions to a set of output drivers to update the display output device.
12. The method of claim 7 wherein the output display device comprises an LED display.

13. A system for rapidly refreshing a sign display panel, the system comprising:
- means for receiving, based on at least one of a first message, a plurality of frames;
- means for storing each of the plurality of frames;
- means for receiving, based on a second message, at least one of a plurality of display instructions; and
- means for processing, upon receipt of the second message, one of the plurality of frames to update a display output device.